

ASH GROVE CEMENT COMPANY MOAPA PAIUTE PROJECT (NVC 05-01)
PERMIT CONDITIONS

I. Permit Expiration

This permit shall become invalid (1) if construction is not commenced (as defined in 40 CFR 52.21(b)(9)) within 18 months after the approval takes effect, (2) if construction is discontinued for a period of 18 months or more, or (3) if construction is not completed within a reasonable time.

II. Notification of Commencement of Construction and Startup

The Permittee must notify EPA in writing of the anticipated date of initial startup of the Ash Grove Cement Company Moapa Paiute Facility not more than sixty (60) days nor less than thirty (30) days prior to such date and must notify EPA in writing of the actual date of commencement of construction and startup within fifteen (15) days after each has occurred. For all purposes of this permit, 'initial startup' shall mean the setting in operation of an affected facility for any purpose. 'Affected facility' is further defined as any apparatus, equipment, or emission unit subject to a standard in this permit or in the applicable Performance for New Stationary Sources regulations found at 40 CFR 60 Subparts A and F.

III. Facility Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit must at all times be maintained in good working order and be operated as intended so as to minimize air pollutant emissions.

IV. Malfunction Reporting

The Permittee must notify EPA by electronic mail transmission (r9.aeo@epa.gov) within two (2) working days following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in Section X this permit. In addition, the Permittee must notify EPA in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Section X, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause.

V. Right of Entry

The EPA Regional Administrator, and/or his authorized representative, upon the presentation of credentials, must be permitted:

1. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this permit;
2. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit ;
3. to inspect any equipment, operation, or method required in this permit; and
4. to sample emissions from the source(s).

VI. Transfer of Ownership

In the event of any changes in control or ownership of the facilities to be constructed, the permit must be binding on all subsequent owners and operators. The Permittee must notify the succeeding owner and operator of the existence of this permit and its conditions by letter, a copy of which must be forwarded to the EPA.

VII. Severability

The provisions of this permit are severable, and, if any provision of the permit is held invalid, the remainder of this permit shall be unaffected.

VIII. Other Applicable Regulations

The Permittee must construct and operate the proposed cement plant in compliance with all other applicable provisions of 40 CFR Parts 51, 52, 60, 63, 70 through 75, and all other applicable federal, state, and local air quality regulations.

IX. Paperwork Reduction Act

Any requirements established by this permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because this permit is not an "information collection request" within the meaning of 44 U.S.C. §§ 3502(4), 3502 (11), 3507, 3512, and 3518. Furthermore, this permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons, 44 U.S.C. § 3502(4) and § 3502(11); 5 CFR Part 1320.5(a).

X. Special Conditions

A. Certification

The Permittee must notify the EPA in writing of compliance with Conditions X.B. and X.K. below, and must make such notification within fifteen (15) days of such compliance. The letter must be signed by a responsible official of the Permittee.

B. Air Pollution Control Equipment and Operation

The AGCC Facility is allowed to operate 8760 hours per year (no restriction). Coal, petroleum coke, tires, and non-hazardous used oil may be used as fuel. The cement plant shall not produce more than 5,300 tons per day, or 1,752,000 tons per year of clinker.

On or before the date of initial startup (as defined in 40 CFR 60.2) of the Facility, and thereafter, the Permittee shall install, continuously operate, and maintain the following controls:

1. Low NO_x burners, multi stage combustion, good operating practice and a Selective Non-Catalytic Reduction (SNCR) system for the control of NO_x from the pyroprocessing system;
2. Fabric filters for the control of PM₁₀ emissions from the pyroprocessing system and the clinker cooler;
3. Fabric filters for the control of PM₁₀ emissions from material handling activities;
4. Enclosures, and fabric filters for the control of PM₁₀ emissions from the coal, coke, limestone, and raw material storage areas;
5. Inherent dry scrubbing, and the in-line raw mill or dry lime scrubbing (D-SO_x) for the control of SO₂ emissions from the pyroprocessing system;
6. Good combustion practice for the control of CO and VOC emissions from the pyroprocessing system;
7. Maintain and operate all emissions units and associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions;
8. Paving, water spray and street sweeping to control PM₁₀ emissions from the paved Plant roads;
9. Application of crushed stone and chemical dust suppressant spray to control PM₁₀ emissions from the unpaved Quarry roads;
10. Limit use of the diesel powered emergency generator to 500 hours per year;

C. Performance Tests

1. Within 60 days after achieving the maximum production rate at which the

Facility will be operated, but no later than 180 days after initial startup, and annually thereafter (within 30 days of the anniversary of the initial performance test), the Permittee must conduct performance tests (as described in 40 CFR 60.8) for SO₂, NO_x, CO, VOC, and PM on the exhaust stack gases from the pyroprocessing system. The Permittee must furnish the EPA a written report of the results of such tests within 30 days of completion of each test. After initial performance tests, upon written request from the Permittee, and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity.

Within 60 days after achieving the maximum production rate at which the Facility will be operated, but no later than 180 days after initial startup, and annually thereafter (within 30 days of the anniversary of the initial performance test), the Permittee must conduct performance tests (as described in 40 CFR 60.8) for PM using EPA Methods 1-5 on the exhaust stack gases from the clinker cooler. The Permittee must furnish the EPA a written report of the results of such tests within 30 days of completion of each test. After initial performance tests, upon written request from the Permittee, and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity.

Within 60 days after achieving the maximum production rate at which the Facility will be operated, but no later than 180 days after initial startup, and annually thereafter (within 30 days of the anniversary of the initial performance test), the Permittee must conduct performance tests (as described in 40 CFR 60.8) for opacity on the exhaust from every baghouse at the Facility. The Permittee must furnish the EPA a written report of the results of such tests within 30 days of completion of each test. After initial performance tests, upon written request from the Permittee, and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity.

2. The performance tests required by Section X.C.1. must be performed in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A, as modified below. The following test methods must be used:
 - i. EPA Methods 1-4 as required to support other methods.
 - ii. Performance tests for the emissions of SO₂ shall be conducted using EPA Method 6C.
 - iii. Performance tests for the emissions of NO_x shall be conducted using EPA Method 7E.
 - iv. Performance tests for the emissions of CO shall be conducted using EPA Method 10 (instrumental).
 - v. Performance tests for the emissions of VOC shall be conducted

- using EPA Method 25A.
- vi. Performance tests for the emissions of PM from the pyroprocessing system shall be conducted using EPA Method 5.
 - vii. Performance tests for the emissions of PM from the clinker cooler shall be conducted using EPA Method 5.
 - viii. Performance tests for the determination of the opacity of emissions from the pyroprocessing system and the clinker cooler shall be conducted using EPA Method 9.
 - ix. Performance tests for the determination of the opacity of emissions from the emissions points controlled by baghouses other than the pyroprocessing system and the clinker cooler shall be conducted using EPA Method 22. If opacity greater than zero is detected at any of these emissions points then EPA Method 9 shall be performed.
 - x. Performance tests for the emissions of PM from the emissions points controlled by baghouses other than the pyroprocessing system and the clinker cooler shall be conducted using EPA Method 5. All of these baghouses must be tested within 5 years of the final permit issuance date.
 - xi. Clinker production shall be determined concurrently with the performance tests on the stack gases listed in paragraph 2(ii) through (vii).

In lieu of the above-mentioned test methods, the Permittee may use equivalent methods with prior written approval from EPA.

The Permittee must notify EPA in writing at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test. The performance test plan shall address the conditions specified in X.C.2., above.

For performance test purposes, sampling ports, platforms, and access must be provided by the Permittee on the emission unit exhaust system in accordance with 40 CFR 60.8(e).

D. Emission Limits for SO₂

On or after the date of initial startup, the Permittee shall not discharge or cause the discharge of SO₂ into the atmosphere from the pyroprocessing system in excess of the following amounts:

- 1. 0.42 lb. SO₂/ton clinker, calculated as a rolling 24-hour average.
- 2. 92.8 lb. SO₂/hr, calculated as a rolling 24-hour average.

E. Emission Limits for NO_x (calculated as NO₂)

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge of NO_x from the pyroprocessing system in excess of the following amounts:

- 1. 1.95 lb. NO_x/ton clinker, calculated as a rolling 30-day average.

2. 430.6 lb. NO_x/hr, calculated as a rolling 30-day average.

F. Emission Limits for CO

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge of CO from the pyroprocessing system into the atmosphere in excess of the following amounts:

1. 1.05 lb. CO/ton clinker, calculated as a rolling 30-day average.
2. 231.9 lb. CO/hr, calculated as a rolling 30-day average.

G. Emission Limits for VOC

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge of VOC from the pyroprocessing system into the atmosphere in excess of the the following amounts:

1. 0.0625 lb. VOC/ton clinker, calculated as a 30-day block average.
2. 13.8 lb. VOC/hr, calculated as a 30-day block average.

H. Emission Limits for PM/PM₁₀

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge of PM₁₀ from the pyroprocessing system into the atmosphere in excess of the the following amounts:

1. 0.070 lb. PM₁₀/ton clinker, averaged over a 3-hour period.
2. 15.5 lb. PM₁₀/hr, averaged over a 3-hour period.

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge of PM from the clinker cooler into the atmosphere in excess of the the following amounts:

1. 0.025 lb. PM/ton clinker, averaged over a 3-hour period.
2. 5.5 lb. PM/hr, averaged over a 3-hour period.

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge of PM from any baghouse other than the pyroprocessing system or the clinker cooler into the atmosphere in excess of the following amounts:

1. 0.01 gr/dscf, averaged over a 3-hour period.

I. Opacity Limits

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere from the pyroprocessing system gases which exhibit an opacity of 10% or greater, averaged over a 6-minute period.

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere from the clinker cooler gases which exhibit an opacity of 10% or greater, averaged over a 6-minute period.

On and after the date of initial startup, the Permittee shall not discharge or cause the discharge into the atmosphere from any emission point other than the pyroprocessing system or the clinker cooler and which is controlled by a baghouse gases which exhibit an opacity of 5% or greater, averaged over a 6-minute period.

J. Emergency Generator

The Permittee shall not use the emergency generator more than 500 hours in any 12-month rolling period.

K. Continuous Emissions Monitoring System

1. Prior to the date of initial startup and thereafter, the Permittee must install, maintain and operate the following continuous monitoring systems (CEMS) in the pyroprocessing system exhaust stack:
 - i. A continuous monitoring systems to measure stack gas SO₂, NO_x, CO, total hydrocarbon (THC) and O₂ concentrations. The systems must meet EPA monitoring performance specification (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specifications 2, 3, 4 and 8A).
 - ii. A continuous flow monitor shall be installed to determine the stack exhaust flow rate to be used in determining mass emission rates. The flow monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 6.
 - iii. Not less than 90 days prior to the date of initial startup of the Facility, the Permittee shall submit to the EPA a quality assurance project plan for the certification and operation of the continuous emission monitors. Such a plan shall conform to EPA requirements contained in 40 CFR 60, Appendix F. The plan shall be updated and resubmitted upon request by EPA.
2. Prior to the date of startup and thereafter, the Permittee shall install, maintain and operate a transmissometer system for continuous measurement of the opacity of the pyroprocessing stack emissions. The system shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 1).
3. Prior to the date of startup and thereafter, the Permittee shall install, maintain and operate a transmissometer system for continuous measurement

of the opacity of the clinker cooler stack emissions. The system shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 1).

L. Reporting and Record Keeping

1. The Permittee must maintain a file of all records, data, measurements, reports, and documents related to the operation of the Facility, including, but not limited to, the following: all measurements or data pertaining to continuous monitoring systems evaluations; all continuous monitoring systems or monitoring device calibration checks; all continuous monitoring data; all records or reports pertaining to adjustments and/or maintenance performed on any system or device at the Facility; all records relating to performance tests; and all other information required by this permit and 40 CFR 60 Appendices A-B and F, recorded in a permanent form suitable for inspection. The file must be retained for five years following the date of such measurements, maintenance, reports and/or records.
2. The Permittee must notify EPA of the date on which the demonstration of the continuous monitoring system performance commences (40 CFR 60.13). This date must be no later than 60 days after maximum capacity has been achieved, but not later than 180 days after initial startup.
3. The Permittee must submit a written report of all excess emissions to EPA for every calendar quarter. The report must include the following:
 - i. The magnitude of the excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, the date and time of commencement, and compilation of each time period of excess emissions.
 - ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of any equipment. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted must also be reported.
 - iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
 - iv. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report.
 - v. Excess emissions shall be defined as any period during which the

average emissions of SO₂, NO_x, CO, VOC, or opacity as measured by the CEMS or COMS exceeds the maximum emission limits set forth in Conditions X.D, E, F, G, H and I.

4. Excess emissions indicated by the CEMS must be considered violations of the applicable emission limit for the purpose of this permit.

M. New Source Performance Standards and National Emissions Standards for Hazardous Air Pollutants

The proposed cement plant is subject to certain sections of the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60) and National Emissions Standards for Hazardous Air Pollutants (40 CFR 63). The Permittee must meet all applicable requirements of 40 CFR 60 Subparts A, F, Y, and OOO and 40 CFR 63 Subparts A and LLL of this regulation.

XI. Agency Notifications

All correspondence as required by this permit must be forwarded to:

r9.aeo@epa.gov

OR

Director, Air Division (Attn: AIR-5)
EPA Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

AND

Environmental Department Director
Moapa Band of Paiute Indians
Moapa, NV 890250